



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,056	11/02/2001	Richard M. Miller-Smith	GB 000154	4898
24737	7590	06/22/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			KOVALICK, VINCENT E	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2677	
DATE MAILED: 06/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/003,056	MILLER-SMITH, RICHARD M.
	Examiner	Art Unit
	Vincent E. Kovalick	2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 February 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to Applicant's Amendment dated February 8, 2005 in response to USPTO Office Action November 9, 2004.

Applicant's remarks have been thoroughly reviewed and considered, and are discussed in item 9 hereinbelow.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5-6, 12, 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easty et al. (USP 6,448,987) taken with Sommers et al. (USP 5,940,076) in view of Cheng (USP 5,986,638).

Relative to claims 1 and 12, Easty et al. **teaches** a graphic user interface for a digital content delivery system using circular menus (col. 2, lines 58-67 and col. 3, lines 1-35); Easty et al. further **teaches** an image control system for controlling a menu on a display comprising: a menu for a display, the menu being arranged as a plurality of simultaneously displayed menu items in a loop (col. 3, lines 65-67; col. 4, lines 1-12 and Figs. 1a-1c); a selector to select an

item from the menu, the selector being moveable with respect to the loop (col. 4, lines 52-63 and col. 5, lines 11-16); and a user input device for inputting an instruction from a user for selecting said menu items from the menu wherein the user input device comprises a control device to generate a control signal to move the selector relative to the loop (col. 3, lines 53-54; 57-58 and col. 5, lines 11-16), wherein movement around the loop configuration of the control device causes a corresponding relative angular movement that is substantially equal between the selector and the loop of the menu. It being understood that a uniform arc spacing between the displayed menu items in the loop would yield a substantially equal angular movement from menu item to menu item.

Easty et al. **does not teach** a user input device, having a loop configuration, comprising a control device to generate a control signal to move the menu selection means around the display loop.

Sommers et al. **teaches** a graphical user interface for an electronic device and method therefor (col. 1, lines 57-67; col. 2, lines 1-12 and Fig. 4); Sommers et al. further **teaches** the loop (wheel) being moveable (col. 3, lines 57-67; col. 4, lines 1-4 and Fig. 4), further still, Sommers et al. **teaches** a user input device comprising a control device (Fig. 3, item 302) to generate a control signal to move the loop and the selector relative to each other (col. 4, lines 36-46).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. the feature as taught by Sommers in order provide the feature of rotating the loop simultaneously with the selector in order to expand the number of applications that may be selected, and provide the system with the means to select between rotating the selector or rotating the menu loop or both simultaneously, which ever expedites the menu selection process.

Easty et al. taken with Sommers et al. **does not teach** the user input device having a loop configuration.

Easty et al. taken with Sommers teaches a loop configured display menu with the means to rotate the loop and the selection means relative to each other.

Cheng **teaches** an apparatus and method for synchronously selecting icons in flywheel controlled color computer monitor (col. 12, lines 40-49 and Fig. 2); Cheng further **teaches** an image control system for controlling a menu on a display comprising: a menu for a display, the menu being arranged as a plurality of simultaneously displayed menu items in a loop (col. 2, lines 3-11, 36-39 and Fig. 2); a selector to select an item from the menu, the selector being moveable with respect to the loop (col. 2, lines 48-51); and a user input device (flywheel) for inputting an instruction from a user for selecting said menu items from the menu wherein the user input device comprises a control device (flywheel) to generate a control signal to move the selector, the control device having a loop configuration, wherein movement around the loop configuration of the control device causes a corresponding relative movement between the selector around the loop of menu icons (col. 2, lines 26-31, 48-67 and col. 3, lines 1-11).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. taken with Sommers et al. the feature as taught by Cheng in order to provide a user input device the operation of which corresponds to the motion of the selector, either clockwise or counter-clockwise around the displayed menu loop.

Regarding claims 3 and 14, Cheng further **teaches** said image control system wherein the control device is a rotary control, rotatable through 360 degrees to generate the control signal in

dependence on the angular position of the control device about the loop configuration (col.2, lines 47-57).

Relative to claims 5 and 16, Sommers et al. further **teaches** said image control system wherein the menu is arranged in a substantially circular form and wherein change in the control signal causes rotation of the circle with respect to a predetermined point of rotation (col. 3, lines 57-67; col. 4 lines 1-4 and Fig. 4).

As to claims 6 and 17, Cheng **teaches** the menu arranged in a carousel arrangement (col. 2, lines 36-39 and Fig. 2); and Sommers et al. **teaches** the menu arranged in a carousel arrangement and displayed in three dimensions on the display (as seen in Figs. 4 and 5).

4. Claims 2, 7-8, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easty et al. taken with Sommers et al. in view of Cheng. as claims 2 and 7-8 are applied to claims 1 and claims 13 and 18 are applied to claim 12 respectively in item 3 hereinabove, and further in view of Satloff (USP 5,667,319).

Relative to claims 2 ,7-8, 13 and 18, Easty et al. taken with Sommers et al. in view of Cheng **does not teach** said image control system wherein the user input devices comprises at least one force-sensing resistor to receive a force from a user and generate the control signal in dependence on this; or wherein the user input device is a joystick.

Easty et al. taken with Sommers et al. in view of Cheng **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Satloff **teaches** a simplified computer keyboard (col. 3, lines 9-67 and col. 4, lines 1-67); Satloff further **teaches** said image control system wherein the user input devices comprises at least one force-sensing resistor to receive a force from a user and generate the control signal in dependence on this; and wherein the user input device is a joystick (col. 7, lines 29-36). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. taken with Sommers et al. in view of Cheng the feature as taught by Satloff in order to simplify the keyboard by providing alternate input and control devices that would be accommodating to children and handicapped user (Satloff, col. 1, lines 12-19).

5. Claims 4, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easty et al. taken with Sommers et al. in view of Chang as applied to claims 1 and 12 respectively in item 3 hereinabove, and further in view of Matzke et al. (USP 4,736,191).

Regarding claims 4 and 15, Easty et al. taken with Sommers et al. in view of Cheng **does not teach** said image control system wherein the control devices is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which pressure is applied.

Easty et al. taken with Sommers et al. in view of Cheng **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Matzke et al. **teaches** a touch activated control method and apparatus (col. 2, lines 12-67; col. 3, lines 1-58 and Fig. 1 item 24); Matzke et al. further **teaches** said image control system wherein

the control devices is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which pressure is applied (col. 3, lines 40-47; col. 4, lines 13-24 and col. 11, lines 49-52).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. taken with Sommers et al. in view of Cheng the feature as taught by Matzke et al. in order to facilitate controlling the motion of a cursor on a display screen by finger touch positioning on a pressure sensitive touch pad, said touch pad being conveniently mounted on a keyboard (Matzke et al., col. 2, lines 12-17).

Regarding claim 20, Matzke et al. **does not specifically teach** the continuous circular movement upon the annular control device causes the corresponding relative movement between the selector and the loop of the menu in a series of discrete steps, this action being in common practice in the manipulation of a cursor on a display device.

Because said action is in common practice and well known in the art, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include said feature in the device as taught by Easty et al. taken with Sommers in view of Cheng in order to facilitate the continuous circular movement of the cursor relative to the said icon loop display.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easty et al. taken with Sommers et al. in view of Cheng as applied to claim 1 in item 3 hereinabove, and further in view of Clapper (USP 6,501,516).

As to claim 9, Easty et al. taken with Sommers et al. in view of Cheng **does not teach** said image control system in which the display is a television screen and the user input device is a television remote control.

Easty et al. taken with Sommers et al. in view of Cheng **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Clapper **teaches** a remotely controlling video display devices (col. 1, lines 7-41); Clapper further **teaches** said image control system in which the display is a television screen and the user input device is a television remote control (col. 2, lines 16-18 and Fig. 1).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. taken with Sommers in view of Cheng the feature as taught by Clapper in order to provide the convenience of being able to manipulate the selection of menu items etc. displayed on the TV screen from a remote distance (Clapper, col. 1, lines 10-15).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easty et al. taken with Sommers et al. in view of Cheng as applied to claim 1 in item 3 hereinabove, and further in view of Kim (USP 5,736,703).

Relative to claim 10, Easty et al. taken with Sommers et al. in view of Cheng **does not teach** a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the input device is a rotary control positioned on the front face of the mobile telephone handset.

Easty et al. taken with Sommers et al. in view of Cheng **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and

wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Kim **teaches** a variable speed select key for a mobile communication device enabling step or speed scrolling of device functions to facilitate function selection (col. 1, lines 36-67 and col. 2, lines 1-53); Kim further **teaches** a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the input device is a rotary control positioned on the front face of the mobile telephone handset (col. 1, lines 18-26).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. taken with Sommers et al. in view of Cheng the feature as taught by Kim in order to provide a variable speed function selection means for a mobile phone that enables varying speed selection of device functions with single hand operation.

8. Claims 11 and 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easty et al. taken with Sommers et al. in view of Cheng as applied to claims 1 and 12 respectively in item 3 hereinabove, and further in view of Bae (USP 6,405,061).

As to claims 11 and 19, Easty et al. taken with Sommers et al. in view of Cheng **does not teach** a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the control device is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which the pressure is applied.

Easty et al. taken with Sommers et al. in view of Cheng **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and

wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Bae teaches a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the control device is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which the pressure is applied (col. 2, lines 17-28 and Fig. 1).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Easty et al. taken with Sommers et al. in view of Cheng the feature as taught by Bea in order to provide finger tip data entry control of a cursor on a display portion of a mobile telephone (Bea, col. 1, lines 11-17).

#### *Discussion on Applicant's Remarks*

9. Applicant's arguments filed February 8, 2005 have been fully considered but they are not persuasive:

Applicant's remarks regarding claims 1, 5, 6, 12, 16 and 17 wherein Applicant argues that there is no teaching "that the movement around the loop configuration of the control device causes a corresponding relative angular movement that is substantially equal between the selector and the loop of the menu" Easty et al. teaches a selector to select items from the menu loop with the selector being moveable with respect to the loop (col. 4, lines 52-63 and col. 5, lines 11-16) and the loop being moveable (col. 3, lines 14-29; col. 4, lines 64-67 and col. 5, lines 1-10 and 34-36).

Summers teaches a control device having a loop configuration wherein movement around the loop configuration of the control device causes a corresponding relative angular movement that is substantially equal between the selector and the loop of the menu (col. 3, lines 52-67 and col. 4, lines 1-4).

Regarding Applicant's remarks relative to claims 2, 7-8, 13 and 18, Satloff teaches a computer input device including a joystick, a sensing resistor-based pointing device or other known directional pointing devices that generate signals that are input to a computer which in turn generates a corresponding action on a display device.

As to claims 4, 15 and 20, as discussed hereinabove relative to claims 1 and 12, the means taught by Easty et al taken with Summers et al. teach the means to perform the tasks taught in claims 4, 15 and 20, the function of the annular pressure pad is to receive pressure from a user and generate the control signal corresponding to the position of the pressure pad, this signal in turn is translated by the system computer to create a corresponding movement of the loop and selector relative to each other.

In response to applicant's argument regarding claim 9, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In further response to applicant's argument regarding claim 9, that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is based in the knowledge generally available to one of ordinary skill in the art.

Relative to Applicant's arguments regarding claims 10-11 and 19, Easty et al. taken with Summers et al. teach a control device being an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which pressure is applied; Bea teaches a mobile telephone handset having a pressure pad control system and a an LCD equivalent display (col. 2, lines 17-33 and Fig. 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the touch pad with an annular footprint in order to facilitate control and manipulation of menu items displayed a circular image.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	6,411,307	Rosin et al.
U. S. Patent No.	6,411,275	Hedberg
U. S. Patent No.	6,208,335	Gordon et al.
U. S. Patent No.	6,058,319	Sadler
U. S. Patent No.	5,627,531	Posso et al.

***Final Rejection***

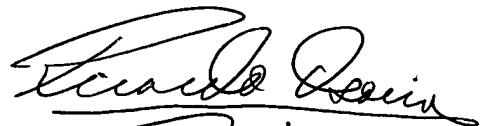
11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Responses***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E Kovalick whose telephone number is 571-272-7669. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications organization where this application or proceeding is assigned is 703-872-9306. may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ricardo Osorio  
Ricardo Osorio

  
Vincent E. Kovalick

Vincent E. Kovalick  
6/10/05